

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

AMENDMENT

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Please amend claims 1, 2, 4, 7, 20, 21, 23, 28, 34, and 40.

Please cancel claims 18, 19, 26, 27 and 30-33, without prejudice.

1. (Currently Amended) A method comprising:
- displaying a set of ~~one or more~~ input objects, the set of input objects to receive ~~one or~~
~~more~~ input decisions including at least:
- an indication of a target retirement age,
- an indication of a target level of investment risk that is constrained to be within a
feasible set of risk that is attainable by a particular investor via a set of
financial products that are available to the particular investor for
investment, and
- an indication of a retirement income goal;
- displaying a set of ~~one or more~~ output values, the set of output values including at least:
- an indication of the probability of achieving the retirement income goal, and
- an indication of the most likely retirement income in current dollars based upon
the ~~one or more~~ input decisions and a recommended set of financial
products selected from the set of financial products that are available to
the particular investor for investment;

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

16 receiving an updated input decision via one or more of the input objects of the set of
17 input objects;
18 determining one or more new output values based upon the updated input decision; and
19 refreshing one or more of the output values of the set of ~~one or more~~ output values to
20 reflect the one or more new output values.

1 2. (Currently Amended) The method of claim 1, wherein a subset of the set of ~~one or more~~
2 input objects and a subset of the set of ~~one or more~~ output values are displayed
3 concurrently on the same screen.

1 3. (Original) The method of claim 1, wherein the target retirement age is constrained to be
2 feasible.

1 4. (Currently Amended) The method of claim 1, further comprising displaying the
2 recommended set of financial products, the recommended set of financial products
3 conditional on the set of ~~one or more~~ input decisions.

1 5. (Original) The method of claim 4, further comprising displaying a recommended
2 allocation of wealth among those of the financial products in the recommended set of
3 financial products.

1 6. (Original) The method of claim 5, wherein the recommended allocation of wealth is
2 conveyed graphically.

1 7. (Currently Amended) A method of providing an indication to a user of a probability of
2 achieving a financial goal, the method comprising:
3 receiving a retirement income goal from the user;

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

4 receiving a plurality of ~~one or more~~ input decisions from the user, including at least:
5 an indication of a target retirement age, and
6 an indication of a target level of investment risk, upon which a probability
7 distribution is dependent, the probability distribution representing a set of
8 possible future portfolio values based upon the plurality of ~~one or more~~
9 input decisions, the target level of investment risk being constrained to be
10 within a feasible set of risk that is attainable by a particular investor via a
11 set of financial products that are available to the particular investor for
12 investment;
13 determining the probability of achieving the retirement income goal; and
14 displaying the probability of achieving the retirement income goal to the user.

1 8. (Original) The method of claim 7, wherein the target level of risk is received via a
2 graphical input mechanism.

1 9. (Original) The method of claim 7, further comprising displaying a recommended set of
2 financial products and a recommended allocation of wealth among the financial products
3 in the set of recommended financial products.

1 10. (Original) The method of claim 7, wherein the probability of achieving the retirement
2 income goal is graphically communicated.

1 11. (Previously Presented) A method comprising:
2 concurrently displaying
3 input objects in a first portion of a screen, the input objects configured to receive
4 one or more input decisions including a level of risk, and

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

5 a set of one or more output values in a second portion of the screen, the set of
6 output values including the short-term risk associated with reaching a
7 financial goal;

8 receiving an updated input decision via one of the depicted input objects;
9 determining one or more new output values based upon the updated values; and
10 updating the second portion of the screen to reflect the one or more new output values.

11 12. (Original) The method of claim 11, wherein the short-term risk comprises an indication
12 of the potential financial loss that might occur with a 5% probability within the next 12
13 months.

1 13. (Original) The method of claim 11, wherein the one or more output values are
2 graphically communicated.

14-19 (canceled)

1 20. (Currently Amended) An apparatus comprising:
2 means for displaying a set of ~~one or more~~ input objects, the set of input objects to receive
3 ~~one or more~~ input decisions including at least:
4 an indication of a target retirement age,
5 an indication of a target level of investment risk that is constrained to be within a
6 feasible set of risk that is attainable to a particular investor via a set of
7 financial products that are available to the particular investor for
8 investment, and
9 an indication of a retirement income goal;

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

means for displaying a set of ~~one or more~~ output values, the set of output values

including at least:

an indication of the probability of achieving the retirement income goal, and

an indication of the most likely retirement income in current dollars based upon

~~one or more~~ the input decisions and a recommended set of financial

products selected from the set of financial products that are available to

the particular investor for investment;

means for receiving an updated input decision via one or more of the input objects of the

set of input objects;

means for determining one or more new output values based upon the updated input

decision; and

means for refreshing one or more of the output values of the set of ~~one or more~~ output

values to reflect the one or more new output values.

21. (Currently Amended) The apparatus of claim 20, further comprising a means for displaying the recommended set of financial products, the recommended set of financial products conditional on the ~~one or more~~ input decisions.

22. (Original) The apparatus of claim 21, wherein the recommended allocation of wealth is conveyed graphically.

23. (Currently Amended) A method comprising the steps of:
a step for displaying a set of ~~one or more~~ input objects, the set of input objects to receive ~~one or more~~ input decisions including at least:
an indication of a target retirement age,

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

5 an indication of a target level of investment risk that is constrained to be within a
6 feasible set of risk that is attainable by a particular investor via a set of
7 financial products that are available to the particular investor for
8 investment, and
9 an indication of a retirement income goal;
10 a step for displaying a set of ~~one or more~~ output values, the set of output values including
11 at least:
12 an indication of the probability of achieving the retirement income goal, and
13 an indication of the most likely retirement income in current dollars based upon
14 the ~~one or more~~ input decisions and a recommended set of financial
15 products selected from the set of financial products that are available to
16 the particular investor for investment;
17 a step for receiving an updated input decision via one or more of the input objects of the
18 set of input objects;
19 a step for determining one or more new output values based upon the updated input
20 decision; and
21 a step for refreshing one or more of the output values of the set of ~~one or more~~ output
22 values to reflect the one or more new output values.

1 24. (Original) The method of claim 23, wherein the target retirement age is constrained to be
2 feasible.

1 25. (Original) The method of 24, wherein the target level of investment risk is received via a
2 graphical input mechanism.

1 26-27. (Canceled)

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

28. (Previously Presented) A method comprising the steps of:

a step for displaying one or more input objects in a first portion of a first screen, the input objects configured to receive one or more input decisions including a financial goal, from which a recommendation is determined, the recommendation including a recommended allocation of wealth among a set of available financial products that are available to a particular investor for investment;
a step for displaying a set of output values in a second portion of the first screen, the set of output values including a probability of achieving a financial goal based upon the recommendation; and
a step for graphically depicting the recommended allocation of wealth among the set of available products in a second screen.

29. (Original) The method of claim 28 wherein the one or more input objects includes a target level of investment risk.

30-33. (Canceled)

34. (Currently Amended) A method comprising:

receiving an indication of a retirement income goal for a particular investor;
displaying a set of ~~one or more~~ input objects within a user interface screen, the set of input objects to receive ~~one or more~~ input decisions including at least:
an indication of a target retirement age for the particular investor, and
an indication of a target level of investment risk for the particular investor that is constrained to be within a feasible set of risk that is attainable by the

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

8 particular investor via a set of financial products that are available to the
9 particular investor for investment; and
10 displaying a set of ~~one or more~~ output values within the user interface screen, the set of
11 output values including at least:
12 an indication of the probability of achieving the retirement income goal, and
13 an indication of the most likely retirement income in current dollars based upon
14 the retirement income goal, the ~~one or more~~ input decisions, and a
15 recommended allocation of wealth among one or more financial products
16 of the set of financial products that are available to the particular investor
17 for investment.

1 35. (Previously Presented) The method of claim 34, further comprising displaying a
2 representation of the recommended allocation of wealth by graphically depicting relative
3 allocations of wealth among those of the financial products of the set of financial
4 products included in a recommended portfolio.

1 36. (Previously Presented) The method of claim 34, further comprising identifying a
2 relationship between future returns of each financial product of the set of financial
3 products and future returns of combinations of one or more factor asset classes of a set of
4 factor asset classes by determining each financial product's effective asset mix with
5 respect to the set of factor asset classes.

1 37. (Previously Presented) The method of claim 36, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 performing returns-based style analysis.

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

1 38. (Previously Presented) The method of claim 36, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 surveying the underlying assets held in the financial product.

1 39. (Previously Presented) The method of claim 36, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 obtaining exposure information based on a target benchmark associated with the financial
4 product.

1 40. (Currently Amended) The method of claim 36, further comprising determining expected
2 returns and volatility of returns for each of a plurality of efficient portfolios based upon
3 the relationship and the ~~one or more~~ input decisions, each of the plurality of efficient
4 portfolios including a combination of one or more of the financial products from the set
5 of financial products.

1 41. (Previously Presented) The method of claim 40, further comprising selecting the
2 recommended portfolio from the plurality of efficient portfolios by identifying an
3 efficient portfolio of the plurality of efficient portfolios that maximizes an expected
4 utility of wealth for the particular investor.

1 42. (Previously Presented) The method of claim 36, further comprising:
2 forecasting returns associated with each core asset class of a set of core asset classes by
3 generating core asset class scenarios based upon future scenarios of one or more
4 economic factors with an equilibrium econometric model; and

5 forecasting returns associated with each factor asset class of the set of factor asset classes
6 by generating factor model asset scenarios based upon the core asset class
7 scenarios.

1 43. (Previously Presented) A method comprising:

2 receiving an indication of a financial goal of a particular investor;

3 receiving input decisions that relate to tradeoffs in connection with pursuing the financial

4 goal, the input decisions comprising an indication of a time horizon that is

5 acceptable to the particular investor, an indication of a level of investment risk

6 that is acceptable to the particular investor and that is constrained to be within a

7 feasible set of risk that is attainable by a particular investor via a set of financial

8 products that are available to the particular investor for investment, and an

9 indication of a level of savings that is acceptable to the particular investor;

10 determining a recommended portfolio of one or more financial products from the set of

11 financial products that are available to the particular investor for investment based

12 upon the input decisions;

13 determining the probability of the particular investor achieving the financial goal based

14 upon a probability distribution representing a set of possible future portfolio

15 values of the recommended portfolio upon expiration of the time horizon by

16 evaluating the cumulative probability that meets or exceeds the financial goal; and

17 providing feedback regarding the likelihood of achieving the financial goal in view of the

18 input decisions by displaying an indication of the probability of the particular

19 investor achieving the financial goal in response to receipt of the input decisions.

1 44. (Previously Presented) The method of claim 43, further comprising displaying a

2 representation of the recommended portfolio by graphically depicting allocations of

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

3 wealth among those of the financial products of the set of financial products included in
4 the recommended portfolio.

1 45. (Previously Presented) The method of claim 43, further comprising identifying a
2 relationship between future returns of each financial product of the set of financial
3 products and future returns of combinations of one or more factor asset classes of a set of
4 factor asset classes by determining each financial product's effective asset mix with
5 respect to the set of factor asset classes.

1 46. (Previously Presented) The method of claim 45, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 performing returns-based style analysis.

1 47. (Previously Presented) The method of claim 45, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 surveying the underlying assets held in the financial product.

1 48. (Previously Presented) The method of claim 45, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 obtaining exposure information based on a target benchmark associated with the financial
4 product.

1 49. (Previously Presented) The method of claim 45, further comprising determining
2 expected returns and volatility of returns for each of a plurality of efficient portfolios
3 based upon the relationship and one or more of the input decisions, each of the plurality
4 of efficient portfolios including a combination of one or more of the financial products
5 from the set of financial products.

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

1 50. (Previously Presented) The method of claim 49, wherein said determining a
2 recommended portfolio comprises identifying an efficient portfolio of the plurality of
3 efficient portfolios that maximizes an expected utility of wealth for the particular
4 investor.

1 51. (Previously Presented) The method of claim 45, further comprising:
2 forecasting returns associated with each core asset class of a set of core asset classes by
3 generating core asset class scenarios based upon future scenarios of one or more
4 economic factors with an equilibrium econometric model; and
5 forecasting returns associated with each factor asset class of the set of factor asset classes
6 by generating factor model asset scenarios based upon the core asset class
7 scenarios.

1 52. (Previously Presented) A method comprising:
2 receiving an indication of a financial goal of a particular investor; and
3 allowing an end user to interactively explore tradeoffs among time, savings, and risk and
4 their impact on a probability of the particular investor achieving the financial goal
5 by
6 displaying one or more input objects in a first portion of a user interface screen,
7 the one or more input objects being constrained to receive feasible input
8 decisions relating to variables involved in pursuing the financial goal, the
9 input decisions comprising an indication of a time horizon that is
10 acceptable to the particular investor, an indication of a level of investment
11 risk that is acceptable to the particular investor, and an indication of a
12 level of savings that is acceptable to the particular investor;

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

determining a recommended portfolio of one or more financial products from a set of financial products that are available to the particular investor for investment based upon the input decisions; and displaying a set of output values in a second portion of the user interface screen, the set of output values comprising an indication of the probability of the particular investor achieving the financial goal based upon the recommended portfolio and the time horizon.

53. (Previously Presented) The method of claim 52 further comprising displaying a representation of the recommended portfolio by graphically depicting allocations of wealth among those of the financial products of the set of financial products included in the recommended portfolio.

54. (Previously Presented) The method of claim 52, further comprising identifying a relationship between future returns of each financial product of the set of financial products and future returns of combinations of one or more factor asset classes of a set of factor asset classes by determining each financial product's effective asset mix with respect to the set of factor asset classes.

55. (Previously Presented) The method of claim 52, wherein said determining each financial product's effective asset mix with respect to the set of factor asset classes comprises performing returns-based style analysis.

56. (Previously Presented) The method of claim 52, wherein said determining each financial product's effective asset mix with respect to the set of factor asset classes comprises surveying the underlying assets held in the financial product.

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

1 57. (Previously Presented) The method of claim 52, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 obtaining exposure information based on a target benchmark associated with the financial
4 product.

1 58. (Previously Presented) The method of claim 52, further comprising determining
2 expected returns and volatility of returns for each of a plurality of efficient portfolios
3 based upon the relationship and one or more of the input decisions, each of the plurality
4 of efficient portfolios including a combination of one or more of the financial products
5 from the set of financial products.

1 59. (Previously Presented) The method of claim 58, wherein said determining a
2 recommended portfolio comprises identifying an efficient portfolio of the plurality of
3 efficient portfolios that maximizes an expected utility of wealth for the particular
4 investor.

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

1 60. (Previously Presented) The method of claim 54, further comprising:
2 forecasting returns associated with each core asset class of a set of core asset classes by
3 generating core asset class scenarios based upon future scenarios of one or more
4 economic factors with an equilibrium econometric model; and
5 forecasting returns associated with each factor asset class of the set of factor asset classes
6 by generating factor model asset scenarios based upon the core asset class
7 scenarios.

1 61. (Previously Presented) A method comprising:
2 one or more computer systems determining a recommended allocation of wealth among a
3 set of financial products that are available for investment by a particular investor,
4 the set of financial products comprising one or more mutual funds, said
5 determining being based upon (a) a financial goal identified by the particular
6 investor, and (b) input decisions relating to variables involved in pursuing the
7 financial goal, the input decisions comprising an indication of a time horizon that
8 is acceptable to the particular investor, an indication of a level of investment risk
9 that is acceptable to the particular investor, and an indication of a level of savings
10 that is acceptable to the particular investor; and
11 the one or more computer systems graphically depicting the recommended allocation of
12 wealth among the one or more financial products of the set of available financial
13 products.

1 62. (Previously Presented) The method of claim 61, further comprising displaying an
2 indication of a probability of the particular investor achieving the financial goal based
3 upon the recommended allocation of wealth and the time horizon.

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

1 63. (Previously Presented) The method of claim 61, further comprising identifying a
2 relationship between future returns of each financial product of the set of financial
3 products and future returns of combinations of one or more factor asset classes of a set of
4 factor asset classes by determining each financial product's effective asset mix with
5 respect to the set of factor asset classes.

1 64. (Previously Presented) The method of claim 61, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 performing returns-based style analysis.

1 65. (Previously Presented) The method of claim 61, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 surveying the underlying assets held in the financial product.

1 66. (Previously Presented) The method of claim 63, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 obtaining exposure information based on a target benchmark associated with the financial
4 product.

1 67. (Previously Presented) The method of claim 63, further comprising determining
2 expected returns and volatility of returns for each of a plurality of efficient portfolios
3 based upon the relationship and the one or more input decisions, each of the plurality of
4 efficient portfolios including a combination of one or more of the financial products from
5 the set of financial products.

1 68. (Previously Presented) The method of claim 67, further comprising selecting a
2 recommended portfolio from the plurality of efficient portfolios by identifying an

efficient portfolio of the plurality of efficient portfolios that maximizes an expected utility of wealth for the particular investor.

69. (Previously Presented) The method of claim 63, further comprising:
forecasting returns associated with each core asset class of a set of core asset classes by
generating core asset class scenarios based upon future scenarios of one or more
economic factors with an equilibrium econometric model; and
forecasting returns associated with each factor asset class of the set of factor asset classes
by generating factor model asset scenarios based upon the core asset class
scenarios.

70. (Previously Presented) A method comprising:
identifying a relationship between future returns of each financial product of a set of
financial products that are available to a particular investor for investment and
future returns of combinations of one or more factor asset classes of a set of factor
asset classes by determining each financial product's effective asset mix with
respect to the set of factor asset classes;
receiving an indication of a financial goal of a particular investor;
displaying a set of one or more input objects to receive input decisions relating to
variables involved in pursuing the financial goal, the input decisions comprising
an indication of a time horizon that is acceptable to the particular investor, an
indication of a level of investment risk that is acceptable to the particular investor,
and an indication of a level of savings that is acceptable to the particular investor;
determining expected returns and volatility of returns for each of a plurality of efficient
portfolios based upon the relationship and the input decisions, each of the

15 plurality of efficient portfolios including a combination of one or more of the
16 financial products from the set of financial products;
17 identifying a recommended portfolio of the plurality of efficient portfolios by selecting an
18 efficient portfolio of the plurality of efficient portfolios that maximizes an
19 expected utility of wealth for the particular investor; and
20 displaying a representation of the recommended portfolio by graphically depicting
21 relative allocations of wealth among those of the financial products of the set of
22 financial products included in the recommended portfolio.

1 71. (Previously Presented) The method of claim 70, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 performing returns-based style analysis.

1 72. (Previously Presented) The method of claim 70, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 surveying the underlying assets held in the financial product.

1 73. (Previously Presented) The method of claim 70, wherein said determining each financial
2 product's effective asset mix with respect to the set of factor asset classes comprises
3 obtaining exposure information based on a target benchmark associated with the financial
4 product.

1 74. (Previously Presented) The method of claim 70, further comprising:
2 forecasting returns associated with each core asset class of a set of core asset classes by
3 generating core asset class scenarios based upon future scenarios of one or more
4 economic factors with an equilibrium econometric model; and

forecasting returns associated with each factor asset class of the set of factor asset classes
by generating factor model asset scenarios based upon the core asset class
scenarios.

75. (Previously Presented) The method of claim 70, wherein the financial goal comprises a retirement income goal.

76. (Previously Presented) The method of claim 75, wherein the indication of the time horizon comprises an indication of a target retirement age for the particular investor.

77. (Previously Presented) The method of claim 76, wherein the set of financial products that are available to the particular investor for investment comprise those that are available to the particular investor through one or more defined contribution plans.

78. (Previously Presented) A method comprising:

a step for identifying a relationship between future returns of each financial product of a set of financial products that are available to a particular investor for investment and future returns of combinations of one or more factor asset classes of a set of factor asset classes by determining each financial product's effective asset mix with respect to the set of factor asset classes;

a step for receiving an indication of a financial goal of a particular investor;

a step for displaying a set of one or more input objects to receive input decisions relating to variables involved in pursuing the financial goal, the input decisions comprising an indication of a time horizon that is acceptable to the particular investor, an indication of a level of investment risk that is acceptable to the

Atty. Docket No.: 59036-249737
Serial No.: 09/904,707
Office Action: April 14, 2004
Amendment & Response: July 14, 2004

12 particular investor, and an indication of a level of savings that is acceptable to the
13 particular investor;
14 a step for determining expected returns and volatility of returns for each of a plurality of
15 efficient portfolios based upon the relationship and the input decisions, each of
16 the plurality of efficient portfolios including a combination of one or more of the
17 financial products from the set of financial products;
18 a step for identifying a recommended portfolio of the plurality of efficient portfolios by
19 selecting an efficient portfolio of the plurality of efficient portfolios that
20 maximizes an expected utility of wealth for the particular investor; and
21 a step for displaying a representation of the recommended portfolio by graphically
22 depicting relative allocations of wealth among those of the financial products of
23 the set of financial products included in the recommended portfolio.